

16. A mobile radio communication system according to claim 13, comprising means for designating at least one of said radio base stations as a synchronizing key station, wherein said at least one radio base station includes state altering means for altering said synchronization establishing information included in the control signal transmitted by the base station to a state indicating that synchronization has been established when the base station receives no control signal for a predetermined period of time during which the base station is in a synchronization non-established state.

17. A mobile radio communication system according to claim 16, wherein said at least one base station is designated as said synchronizing key station when said at least one base station is installed.

18. A mobile radio communication system according to claim 16, wherein said predetermined period of time is a time required for the base station to repeat a determination that the base station receives no radio control signal by a predetermined number of times.

19. A mobile radio communication system according to claim 13, comprising means for designating at least one of said radio base stations as a synchronizing key station, wherein said at least one base station includes means for reducing the priority of the base station by "1" thereby generating a new priority, means for increasing said new priority by "1" so as to return it to the original priority when the base station receives no control signal for a predetermined period of time, and state altering means for altering said synchronization establishing information included in the control signal transmitted by the base station to a state indicating a synchronization established state upon returning the new priority to the original priority.

20. A mobile radio communication system according to claim 13, wherein the synchronization establishing means of each of said radio base stations has correcting means for correcting a starting time for transmission of the radio control signal transmitted by the base station based on a propagation delay time of radiowave between the base station and the transmitting base station upon establishing synchronization with said transmitting base station.

21. A mobile radio communication system according to claim 20, wherein said propagation delay time is determined based on a size of a service zone covered by the base station.

22. A mobile radio communication system according to claim 20, wherein said propagation delay time is predetermined and stored in the base station.

23. A mobile radio communication system according to claim 20, wherein said propagation delay time is determined based on a time interval required for a radio wave to make one round transmission between the base station and the transmitting base station when repeatedly transmitting and receiving the radio wave at a predetermined time interval between them.

24. A mobile radio communication system according to claim 13, wherein each of said radio base stations has means for altering said synchronization establishing information included in the radio control signal transmitted from the base station to a synchronization non-established state before establishing synchronization in the base station which has not previously established synchronization.

25. A mobile radio communication system having a plurality of radio base stations, each of said radio base

stations comprising: means for including, in a radio control signal transmitted by the base station, priority information indicating a priority of the base station relating to synchronization establishment and synchronization establishing information indicating whether the base station has established synchronization with another radio base station;

priority determining means for determining, when the base station has not established synchronization with any other one of the radio base stations, whether a comparison of the priority of the base station with the priority indicated by the priority information included in the radio control signal transmitted from another transmitting base station indicates that the base station is allowed to establish synchronization with the transmitting base station;

means operative, when the base station is allowed to establish synchronization with the transmitting base station, for establishing synchronization with said transmitting base station when the synchronization establishing information included in the radio control signal transmitted from the transmitting base station indicates that the transmitting base station has established synchronization; and

means operative, when the base station has established synchronization with said transmitting base station, for making the priority of the base station the same as the priority of said transmitting base station and including the new priority information in said radio control signal.

26. A mobile radio communication system according to claim 25, wherein each of said radio base stations further includes means operative, when the base station is not in a synchronization state, and receives no control signal for a predetermined period of time from another radio base station, for changing the synchronization establishing information of the base station to a state indicating that synchronization has been established when the base station is designated as a key station for synchronization establishment, and maintaining the synchronization establishing information of the base station at the synchronization non-established state when the base station is not designated as the key station.

27. A mobile radio communication system according to claim 26, wherein the designation of the key station is made when installing the radio base station.

28. A mobile radio communication system according to claim 27, wherein, the designation of the key station can be altered by a higher rank station after installation of the radio base station.

29. A mobile radio communication system according to claim 25, wherein said radio control signal is a broadcast signal transmitted by each of the radio base stations toward a mobile station in a service zone of the radio base station.

30. A mobile radio communication system according to claim 29, wherein a transmitter identification code is included in said broadcast signal, and contents of the transmitter identification code are identified by each of the radio base stations when it receives said broadcast signal.